



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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**DEC 19 2008**

Ref: 8EPR-N

Ms. Teresa Johnson  
Bureau of Land Management, Casper Field Office  
2987 Prospector Drive  
Casper, Wyoming 82604

Re: South Gillette Area Coal Lease Applications  
Draft Environmental Impact Statement  
CEQ # 20080426

Dear Ms. Johnson:

The U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the South Gillette Area Coal Lease Applications Draft Environmental Impact Statement (DEIS). Our comments are provided in accordance with our authorities under the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C) and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609.

The Bureau of Land Management proposes to hold competitive lease sales and issue maintenance leases for four Lease by Applicant (LBA) tracts (Caballo West, Belle Ayr North, Maysdorf II and West Coal Creek) located adjacent to four existing coal mines (Caballo, Belle Ayr, Cordero Rojo and Coal Creek). The DEIS also considers two alternatives that modify and expand the proposed tracts. The area under consideration is located in Campbell County, Wyoming between eight and twenty-five miles south-southeast of Gillette. The Belle Ayr North LBA Tract includes a portion of the Bishop Road, and the Maysdorf II LBA Tract includes portions of Highway 59, Haight and Hilight county roads, and Maysdorf Cemetery. The DEIS indicates that the coal underlying these structures is considered unsuitable for mining, although a study is being done to analyze the feasibility of relocating Bishop Road and plans are underway to relocate Maysdorf Cemetery. After careful review of the DEIS, EPA's primary concern is air quality. Additional comments regarding wetlands, noxious weeds and greenhouse gas emissions are enclosed.

EPA is particularly concerned with assuring that air quality in the Powder River Basin does not exceed the Clean Air Act standards and minimizing potential localized air quality impacts from blasting and mining activities to the surrounding school bus stops and residences. Section 3.4.2.3, references the Memorandum of Agreement (MOA) between the Wyoming Department of Environmental Quality (WDEQ) and EPA (January 24, 1994), which acknowledges that some limitations may exist in modeling short term Particulate Matter (PM<sub>10</sub>) and that PM<sub>10</sub> monitoring should be used for compliance purposes. While no exceedances have been measured recently at the South Gillette Coal Mines listed in the DEIS, EPA is concerned

since a significant number of exceedances have occurred in the last 2-years at nearby mining facilities. The control measures described in the DEIS Section 3.4.2.3 significantly reduce point source and fugitive dust emissions and should be updated with cooperation with the WDEQ as appropriate or if exceedances of a standard occurs. A condition of the MOA is to continue PM<sub>10</sub> monitoring near the mine to ensure compliance with the 24-hour PM<sub>10</sub> NAAQS. BLM should ensure that the mine operators consult with the WDEQ on any monitoring site adjustments or additions due to changes in the active mine area. Particular attention should be made to shifting active mine areas and the placement of air monitoring sites in order to determine maximum air quality impacts from the mine.

The DEIS also includes the results of the cumulative analysis for the Powder River Basin Coal Review (2006), which are presented in Tables 4-10, 4-11 and 4-12. The Coal Review analysis predicted several negative adverse air quality impacts for the base case year of 2002 and future year for the lower and upper production scenarios of 2010. The Final EIS needs to be updated to include the findings of the most recent Task 3A Powder River Basin Coal Review analysis (2008), which projects exceedances of PM<sub>10</sub> and PM<sub>2.5</sub> for both annual and 24-hour NAAQS in Wyoming in 2015.

EPA is also concerned about the proximity of the mining operation to homes and school bus stops. Children may be especially susceptible to the health effects of NO<sub>2</sub> and fine particulates. Children have greater exposure to air pollution because of their faster breathing rates and the amount of time spent playing outdoors. Particulates and NO<sub>2</sub> can aggravate asthma, irritate airways, and cause coughing and breathing difficulties. The Final EIS (FEIS) should detail mitigation and monitoring measures that will be undertaken to minimize exposure to particulates and NO<sub>2</sub> for children waiting at bus stops near the mining areas.

It is EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of the project. The DEIS includes the proposed alternative as well as two alternatives that slightly modify the lease tracts being proposed for lease. The DEIS does not indicate which alternative is the preferred alternative and most of the impacts are the same for the proposed action and actions 2 and 3. Because of this, it is impossible to determine which alternative is the least environmentally damaging. EPA is rating this DEIS as Environmental Concerns - EC, Insufficient Information - 2 (EC-2). The EC rating means that EPA's review of the proposed alternatives has identified environmental impacts to air quality that should be avoided in order to fully protect the environment. Mitigation measures should be fully fleshed out and implemented to reduce the environmental impact. The 2 rating means the DEIS does not contain sufficient information to fully assess the environmental impacts that should be avoided in order to fully protect the environment. A full description of EPA's EIS rating system is enclosed.

If you have any questions regarding the NEPA process or this rating, please contact Rachel Eichelberger at 303-312-6008 or me at 303-312-6004.

Sincerely,

A handwritten signature in cursive script, appearing to read "Larry Svoboda".

Larry Svoboda  
Director, NEPA Program  
Office of Ecosystems Protection and Remediation

Enclosures

## **Additional Comments by the Region 8 Environmental Protection Agency Draft Environmental Impact Statement for the South Gillette Area Coal Lease DEIS**

### *Air Quality*

EPA commends BLM for updating the Powder River Coal Review (2008) to help evaluate the cumulative impacts of coal and other energy development in the Powder River Basin through 2015. EPA recommends the updated modeling be included in the South Gillette Area Coal Lease FEIS.

EPA recommends that the DEIS disclose that emissions from coal combustion have been identified as a significant source of atmospheric mercury. EPA's Web site at <http://www.epa.gov/oar/mercury.html> has several reports summarizing the environmental impacts of mercury, primarily bioaccumulation in the aquatic food web. Concentrations of mercury emitted as a result of combustion vary depending on the chemistry of coal deposits and the type of air pollution controls. For purposes of the DEIS, we recommend including any existing information on mercury emissions from power plants currently burning coal from the mines.

Table 3-6 contains background measured ambient data through 2002 or 2004. Data should be updated to reflect current conditions through 2007 please refer to the following link: <http://www.epa.gov/air/data/index.html>

### *Proximity to Residences and School bus stops*

EPA is concerned about the potential health risk to the public associated with short term exposure to NO<sub>2</sub> from blasting emissions. In Section 3.4.3.3, the DEIS discusses various mitigation strategies that have been used historically to mitigate NO<sub>2</sub> exposures in the Powder River Basin, but does not commit to any specific mitigation strategy. It goes on to say that the WDEQ has not required the mines to implement any specific measures, but the mines have voluntarily committed to control blasting emissions. The DEIS acknowledges that while no one single procedure has consistently proven successful in mitigating blasting-related NO<sub>2</sub> emissions, the most successful control measure has been to reduce the size of the cast blasting shots.

### *Wetlands*

Executive Order 11990 directs all Federal Agencies to provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands. Indirect draining of, or direct disturbance of, wetland areas should be avoided. If there may be wetlands in the project area, EPA recommends consultation with the U.S. Army Corps of Engineers to determine whether any of the project activities require a Clean Water Act (CWA) Section 404 permit. If disturbance is unavoidable, EPA suggests BLM require a commitment to replace *in-kind* such impacted wetlands. As studies indicate that traditional mitigation is generally not successful in fully restoring wetland function, EPA suggests that BLM require a two-to-one mitigation of wetland disturbance. Due to the time

it can take to adequately reclaim disturbed wetlands and the potential life of this project, BLM may consider requiring mitigation to begin concurrently with the disturbance.

#### *Noxious Weeds*

Noxious weeds are becoming an increasingly difficult problem to manage on western lands, including in the Powder River Basin. The FEIS should list the noxious weeds and exotic plants that occur in the resource area. EPA recommends the FEIS detail a strategy for prevention, early detection of invasion, and control procedures for each species of noxious weed that may pose a threat in the project area. EPA is pleased that the reclamation plans for the existing mines include steps to control invasion by noxious weeds.

#### *Greenhouse Gas Emissions and Global Warming*

EPA is pleased that the DEIS includes a section on greenhouse gas emissions and global warming, including estimates of CO<sub>2</sub> equivalent emissions at the SGAC Mines. However, there is no mention of any greenhouse gas emission mitigation measures in the DEIS. The FEIS should include some potential mitigation for the additional greenhouse gases that will be emitted by the SGAC Mines if the maintenance leases are issued. BLM should also include an estimate of the greenhouse gases emitted in the burning of the mined coal, as that is a logical consequence of mining the coal, and accounts for a large percentage of greenhouse gas emissions.

